

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/001292 A1

(51) International Patent Classification⁷: F23N 5/24

(21) International Application Number:
PCT/IT2002/000409

(22) International Filing Date: 21 June 2002 (21.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): SIT LA
PRECISA S.P.A. [IT/IT]; Viale Dell'industria, 31/33,
I-35129 Padova (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GIACOMELLI,
Massimo [IT/IT]; Via Pomai, 6, I-30035 Mirano (IT).
TREVISANATO, Nicola [IT/IT]; Via Tominz, 21,
I-30174 Zelarino (IT). BARBOLINI, Bruno [IT/IT]; Via
Nicolodi, 2, I-35100 Padova (IT).

(74) Agents: FABRIS, Stefano et al.; Cantaluppi & Partners
S.R.L., Via Matteotti, 26, I-35137 Padova (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

Declaration under Rule 4.17:

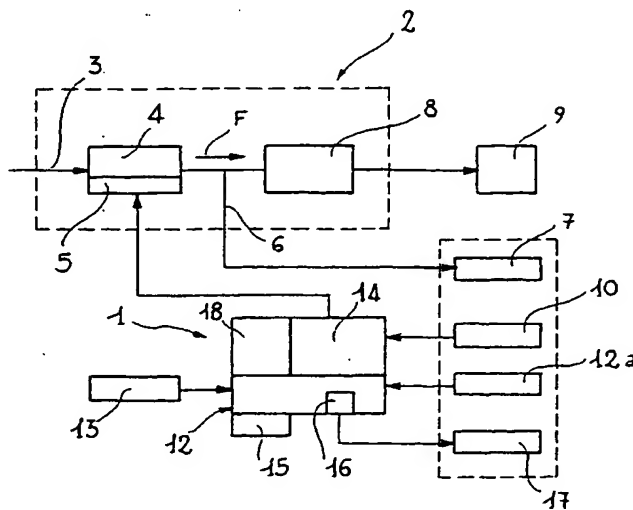
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: CONTROL UNIT FOR CONTROLLING THE DELIVERY OF A COMBUSTIBLE GAS IN VALVE UNITS, PARTICULARLY FOR WATER HEATING APPARATUSES, AND VALVE UNIT INCLUDING SAID UNIT



(57) Abstract: A control unit is described for controlling the delivery of a combustible gas in a valve unit (2) of the type comprising valve means (4) for shutting off the gas which are subject to the operational control of a magnetic safety unit (5) with thermocouple (10). The control unit comprises an electronic circuit assembly (12) arranged for connection to sensor means (13) adapted to detect the presence of inflammable vapours or other dangerous substances, the circuit assembly (12) being supplied by electric power generating means. The circuit assembly (12) comprises an electronic type switch (14) acting on the electric circuit (11) for supplying the magnetic unit (5) so as to interrupt the circuit and operate the valve means (4) for closure in the presence of inflammable vapours detected by the sensor means (13).

WO 2004/001292 A1